(a) providing cells comprising an expression vector encoding HG20 and an expression vector encoding $GABA_BR1a$ or $GABA_BR1b$, wherein said expression vector encoding HG20 comprises the isolated nucleic acid molecule of claim 1;

(b) culturing the cells under conditions such that HG20 and $GABA_BR1a$ or $GABA_BR1b$ are expressed and heterodimers of HG20 and $GABA_BR1a$ or $GABA_BR1b$ are formed;

C1 cont.

(c) exposing the cells to a labeled ligand of $GABA_B$ receptors in the presence and in the absence of the substance;

(d) measuring the binding of the labeled ligand to the heterodimers of HG20 and $GABA_BR1a$ or $GABA_BR1b$;

where if the amount of binding of the labeled ligand is less in the presence of the substance than in the absence of the substance, then the substance is a potential agonist or antagonist of $GABA_B$ receptors.

16. (2x amended) A method of producing functional $GABA_B$ receptors in cells comprising:

(a) transfecting cells with:

C2

(1) an expression vector that encodes an HG20 protein under conditions favoring expression of HG20 in the cells, wherein said expression vector comprises the isolated nucleic acid molecule of claim 1; and

(2) an expression vector comprising DNA that encodes $GABA_BR1a$ or $GABA_BR1b$ under conditions favoring expression of $GABA_BR1a$ or $GABA_BR1b$ in the cells; and

(b) culturing the cells under conditions such that heterodimers of HG20 and $GABA_BR1a$ or $GABA_BR1b$ are formed where the heterodimers constitute functional $GABA_B$ receptors.

STATUS OF CLAIMS

Claims 1, 2, 4-5, 7-9, 14, 16, 18-20 are presented pending of which claims 14 and 16 are amended herein.